

HANDBOOK OF PHONOLOGICAL DATA  
FROM A SAMPLE OF THE WORLD'S LANGUAGES

A Report of the Stanford Phonology Archive

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900 Aymara	900 Aymara	900 Aymara
900 01 p <sup>01</sup>	17 t/s-aspirated <sup>01</sup>	33 l-palatal
900 02 p-aspirated <sup>01</sup>	18 t/s-ejective <sup>01</sup>	34 r-flap
900 03 p-ejective <sup>01</sup>	19 t/s-hacek-retroflex <sup>01</sup>	
900 04 t <sup>01</sup>	20 t/s-hacek-retroflex-aspirated <sup>01</sup>	
900 05 t-aspirated <sup>01</sup>	21 t/s-hacek-retroflex-ejective <sup>01</sup>	51 i [iota] <sup>07</sup> 62
900 06 t-ejective <sup>01</sup>	22 t/s-hacek <sup>01</sup>	[e] <sup>63</sup> (allo,free)
900 07 c <sup>01</sup>	23 t/s-hacek-aspirated <sup>01</sup>	52 i-long <sup>08</sup>
900 08 c-aspirated <sup>01</sup>	24 t/s-hacek-ejective <sup>01</sup>	53 a [alpha-unrounded] <sup>64</sup> [epsilon] <sup>65</sup>
900 09 c-ejective <sup>01</sup>	25 s	54 a-long <sup>08</sup>
900 10 k <sup>01</sup>	26 s-hacek	55 i-trema <sup>09</sup> [iota-trema] <sup>67</sup> (free) [e-trema] <sup>67</sup> (allo,free)
900 11 k-aspirated <sup>01</sup>	27 x [h] <sup>06</sup> 61	56 i-trema-long <sup>08</sup>
900 12 k-ejective <sup>01</sup>	28 m	57 yod
900 13 q <sup>01</sup> 02 [x-uvular] <sup>60</sup>	29 n	58 w
900 14 q-aspirated <sup>01</sup> 02	30 n-palatal	
900 15 q-ejective <sup>01</sup>	31 eng	
900 16 t/s <sup>01</sup>	32 l	

900 \$a Aymara \$b Jaqaru \$d Andean \$e Bolivia \$f 600,000 \$g Merritt Ruhlen \$g Jim Lorentz (review)

900 \$a Hardman, M.J. \$b 1966 \$c Jaqaru: Outline of Phonological and Morphological Structure \$f Janua Linguarum: Series Practica No. 22 \$g Mouton: The Hague \$q informants

900 \$a INTONATION \$A Eight basic intonation contours ("made by means of tracing the tenth harmonic on narrow-band spectrograms" (p.26)) are shown on p.27, such as "yes-answer-expected question" or "amazed question." "There are three levels to which the final intonation may fall: ...extralow, ...low, conclusive, ...higher, inconclusive." Other comments on p.28.

900 \$a MORPHEME \$A "The final syllable of any root is CV," (as is the first). (p.26) However, "any CV syllable other than the first syllable of a root may become C." (p.32) "All roots except greetings...contain a minimum of two syllables." (p.26)

900 \$a PHONOLOGICAL WORD \$A The initial syllable always contains V. The final syllable of a "breath group" is CV. All other syllables are CV or C. (p.26)

900 \$a STRESS \$A "Stress in Jaqaru is non-phonemic. It normally occurs on the penultimate vowel of the word and is frequently accompanied by a rise in pitch.... In words of three vowels or more, a secondary stress occurs before the main stress." (p.26)

900 \$a SYLLABLE \$A (C)(V(:)) \$A "Long sequences of C syllables occur with frequency." (p.26) No phonetic description of such syllables is given. They are often shortened from morphemes of basic CV form. (p.32)

900 \$a VOWELS \$A Hardman gives a chart on the "Effect of the consonants on the vowels" in which it is indicated that the retroflex-palatal series of stops (/t/s-hacek-retroflex, t/s-hacek-retroflex-aspirated, t/s-hacek-retroflex-ejective/) raises vowels. However, Hardman nowhere gives a rule which shows a vowel that is raised to a high position in the environment of a retroflex-palatal. [JL]

900 01 \$A "In the occlusive-affricate set, those listed as occlusives may occasionally occur with affrication, especially when glottalized; those listed as affricates may occur with very little or no affrication, especially /t/s-hacek-retroflex/ and /t/s-hacek-retroflex-ejective/." (p.24)

900 06 \$A [h] is described as a "voiceless pharyngeal aspirate." (p.24)

900 07 \$A Tongue height for [iota] inferred from symbol.

900 08 \$A Long vowels have a length of "approximately one and one half to two ordinary vowels." "Long vowels occur only in the first syllable of roots." (p.25)

900 09 \$A Hardman uses phonetic symbols for back rounded vowels, but consistently describes them as unrounded.

900 60 \$A /q/ is realized as [x-uvular] "in rapid speech, in final position or before another occlusive." (p.23)

900 61 \$A /x/ is realized as [h] "word initially." (p.24)

900 62 \$A /i/ is realized as [iota] in the environment: /c/.../q/ (2) before /r-flap/.

900 63 \$A /i/ is lowered to [e] (1) after uvular stops if not itself followed by /n/, a palatoalveolar, or a palatal; (2) before uvular stops if not preceded by /c/; (3) word finally after labial stops, /s/, /t-ejective/, and /k-ejective/; (4) optionally in word final position after /w/, /t/, or /l/.

900 64 \$A /a/ is realized as [alpha-unrounded] "next to /q/." (p.24)

900 65 \$A /a/ is realized as [epsilon] "before /yod/." (p.24)

900 67 \$A /i-trema/ is lowered to [e-trema] (1) after uvular stops if not itself followed by /n/, a palatoalveolar, or a palatal; (2) before uvular stops if not itself preceded by /n-palatal/ (Any consonant except /n/, a palatoalveolar, or a palatal may optionally intervene between the uvular stop and the preceding or following /i-trema/ in (1) and (2) above.); (3) in free variation with [iota-trema] before /r-flap/; (4) after alveolar or velar ejective stops; (5) word finally unless preceded by /s-hacek/; (6) in free variation with [i-trema] and [iota-trema] word initially.